

Key dates	
1348	Black Death reaches England
1440	Printing Press invented

Key People	
Hippocrates	Philosopher who created Theory of Four Humours
Galen	Philosopher who created Theory of Opposites

Middle Ages - 1250-1500	
	Believed the following about illness...
<b>Prevention</b>	Church Hygiene Regimen Sanitatis Diet Purifying the air
<b>Causes</b>	Punishment sent by God Astrology Four Humours Miasma
<b>Treatment</b>	Healing Prayers and Mass Fasting Astrology Blood letting / Purging Herbal Remedies - Theriaca Bathing
<b>Healers</b>	Physicians - used urine, astrology etc. Apothecaries Surgeons Hospitals (run by monks) Women at home

Key Terms/Concepts	
Malnutrition	An illness caused by lack of food
Famine	Food shortage, usually due to bad harvests
Paralysis	Being unable to move either all or part of your body as a result of illness, poison or injury
Diagnosing	Deciding what is wrong with a patient considering different symptoms.
Physician	Someone who practices medicine - limited training in medieval times
Vivisection	Criminals sentenced to death by vivisection had their bodies cut open and examined by physicians and medical students
Barber Surgeon	Barbers worked with sharp knives, so as well as giving people haircuts, they also carried out medical procedures such as blood letting
Mass	Roman Catholic service where bread and wine is given. Catholics believe that this involves a miracle: The bread and wine is turned into the body and blood of Christ
Pilgrimage	A journey to an important religious monument or place
Dysentery	Very Severe Diarrhea
Penance	A punishment inflicted on yourself to show that you are sorry for your sins
Scourge	A person or thing that causes great suffering
Quarantine	Separating the sick from the healthy to stop the spread of a disease. Those who are sick are not allowed to leave the quarantined area.
Regimen Sanitatis	Loose set of instructions believed to help maintain good health

Medieval England was not an easy place to live in. Most of England's population worked in the fields, growing and harvesting crops for wealthy landowners. Poor nutrition, particularly at times of famine when food was scarce, and hard physical labour, meant that sickness and disease were never very far away. Some people lived in towns and cities, but this was not much better than the country: the crowded streets and lack of drains meant diseases spread easily. Homes were heated by open fires, and being exposed to smoke every day meant lung diseases were common. Nearly half of the population died before reaching adulthood. There wasn't much scientific knowledge in Medieval England. In fact, there weren't many people looking to science to cure diseases and ailments at all. Instead, the Catholic Church used ancient texts, written by leading doctors and physicians such as Hippocrates and Galen, to explain why people caught diseases - or they said it was God's will when somebody became ill. People believed God could send disease as a punishment for sinful behaviour. Most of the time, this explanation was enough. Only in times of terrible disease, such as during the Black Death in 1348, did people start to question the authority of the catholic church on matters of medicine.

**Key factors involved in Medicine during the Middle Ages 1250-1500**

Church	Education	Attitudes (Respect for tradition)	Individuals	Government
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**Exam Questions**

*'Explain one way' 4 mark*

1. Explain one way in which ideas about the treatment of disease were different in the 13<sup>th</sup> Century to the 17<sup>th</sup> Century.
2. Explain one way in which ideas about prevention of disease were different in the 13<sup>th</sup> Century to the 17<sup>th</sup> Century.
3. Explain one way in which ideas about causes of disease were different in the 13<sup>th</sup> Century to the 17<sup>th</sup> Century.
4. Explain one way in which ideas about healers were different in the 13<sup>th</sup> Century to the 17<sup>th</sup> Century.

*'Explain' 12 mark*

1. Explain why there was continuity in ideas about the cause of disease during the period 1250-1500. You may use the following information in your answer: The church and Galen. You must also use information of your own.
2. Explain why there was little change in the care provided by hospitals in the period 1250-1500. You may use the following information in your answer: ideas in the church and herbal remedies.

*'How far?' 16 mark*

1. 'Hospital treatment in England in the period 1250-1500 was very rare'. How far do you agree? Explain your answer. You may use the following information in your answer: charity in hospitals and care in the home.
2. 'The Theory of the Four Humours was the main idea about the cause of disease in the Middle Ages'. How far do you agree? Explain your answer. You may use the following information in your answer: university training and Galen's ideas.

Consolidation questions for Medieval Medicine

1. Why did people point to God for the causes/treatment/prevention of disease?	16. What was the <i>regimen sanitatis</i> ?
2. Which disease was particularly attributed to God?	17. Who produced remedies for prevention and treatment?
3. Astrology was another supernatural cause of disease. What would astrologers look at after examining the alignment of stars/planets?	18. Who performed surgery and why?
4. Who came up with the Theory of the Four Humours?	19. How would people purify the air to prevent miasma?
5. What were the Four Humours?	20. What was the main function of Medieval hospitals?
6. What was the name of the cause of disease that was attributed to 'bad smells'?	21. What % of hospitals were run by the Church?
7. Describe how urine charts were used.	22. How many hospitals were there in England by 1500?
8. Explain why the church limited the development of medicine during the medieval period.	23. Where did most care take place however?
9. Explain why technology limited the development of medicine during the medieval period.	24. Who mostly took the responsibilities of care in medieval England?
10. Who came up with the Theory of Opposites?	25. What did people believe caused the Black Death?
11. Describe the Theory of Opposites and how it was used for treatment.	26. What were the ideas for treatment?
12. What was blood-letting?	27. What did the government do to help with the Black Death?
13. What was purging and which humour did it aim to balance?	28. Why was there so little change during this period?
14. What was a theriaca?	29. What are the key factors that are involved in this period?
15. What was a pomander?	30. How much progress was made during this period?

# GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 2 - The Medical Renaissance in England 1500-1700

Key dates	
1536	Dissolution of the monasteries
1543	Publication of Vesalius's 'Fabric of the Human Body'
1628	William Harvey publishes his book on the circulation of blood
1660	Royal Society met in London for the first time
1665	Great Plague arrives in Britain
1676	Thomas Sydenham publishes 'Observationes Medicae'

Key people	
Thomas Sydenham	Observed patients and categorized illness into different groups and look for remedies to tackle those diseases
Andreas Vesalius	Created first detailed anatomically correct drawings of the human body, proving Galen to be incorrect.
William Harvey	Discovered that the heart pumps blood around the body - circulatory system.
Ambroise Pare	Discovers the use of silk ligatures.

Medical Renaissance 1500-1700			
Believed the following about illness...			
<b>Prevention</b>	Church Hygiene Regimen Sanitatis Diet Purifying the air	<b>Treatment</b>	Healing Prayers, Mass, Fasting Blood letting / Purging Herbal Remedies Chemical Cures Bathing
<b>Causes</b>	Punishment sent by God Four Humours Contagion Miasma	<b>Healers</b>	Physicians Apothecaries Surgeons Hospitals Women at home and community care Pest Houses

Key Terms/Concepts	
Secular	Not religious or in any way connected with spiritual beliefs
Alchemy	This was an early form of chemistry. Alchemists tried to turn one material into another: mostly, they were trying to discover a way of making gold
Printing Press	A machine for printing text or pictures. It had movable letters so that many copies of the same text could be printed
Royal Charter	A document from the monarch, granting a right or power to a particular person or group. A royal charter shows that the monarch is supportive of a particular project
New World	North and South America. Europeans were only aware of their existence from 1492
Dysentery	Very Severe Diarrhea
Journeyman	An experienced member of a profession who was not yet experienced enough to have his own business. Journeymen usually worked for a master until they had enough expertise to start their own business.
Dissolution of the monasteries	Henry VIII split from the catholic church and disbanded certain religious institutions and confiscated their land
Pneuma	Means 'breath of life'. Galen thought it was both the air that you breathe and your life force, or soul.
Quack doctor	Somebody who did not have any medical qualifications, but who sold their services as a doctor or apothecary.

## GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 2 - The Medical Renaissance in England 1500-1700

'Renaissance' is a French word that means rebirth. The Medical Renaissance refers to a period when new ideas were beginning to influence medicine. These new ideas were slowly breaking down old beliefs and rethinking the way the world worked. At this time, Protestantism challenged the teachings of the Catholic Church - this made the Catholic Church much less able to promote its preferred beliefs about science and nature. Scientists provided evidence that the Greek teachings about how the world worked were incorrect. Vesalius, a doctor working in Padua, proved through dissection that Galen's work on anatomy was wrong. Although these ideas took a long time to become widespread, the new printing press meant that they could be published and spread even though they went against the teachings of the church. Between the years 1500 and 1700, there were certainly a lot of new, exciting ideas. However, as you will see, the impact that these ideas had on medical treatments during this period was minimal. It took a long time for people to let go of their old, trusted beliefs about the Theory of the Four Humours. Therefore, this period was more about laying the foundations for changes in medicine to come, rather than changes in medicine at the time.

### Key factors involved in Medicine during the Medical Renaissance 1500-1700

Church	Communication	Attitudes (Seeking Improvement)	Individuals	Science and Technology
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### Exam Questions

<i>'Explain one way' 4 mark</i>	<i>'Explain' 12 mark</i>	<i>'How far?' 16 mark</i>
<ol style="list-style-type: none"> <li>1. Explain one way in which ideas about the cause of diseases and illness were similar in the 14<sup>th</sup> and 17<sup>th</sup> centuries.</li> <li>2. Explain one way in which ideas about the treatment of disease were different in the 17<sup>th</sup> century from the 13<sup>th</sup> century.</li> <li>3. Explain one way in which ideas about preventing the plague were different in the 14<sup>th</sup> and 17<sup>th</sup> centuries.</li> </ol>	<ol style="list-style-type: none"> <li>1. Explain why there were changes in the way ideas about the causes of disease and illness were communicated in the period 1500-1700. You may use the following in your answer: the printing press and royal society.</li> <li>2. Explain why there was continuity in the way disease was treated 1500-1700. You may use the following information in your answer: the great plague and attitudes in society.</li> </ol>	<ol style="list-style-type: none"> <li>1. 'Individuals had the biggest impact on medical training in the 17<sup>th</sup> and 17<sup>th</sup> centuries'. How far do you agree? Explain your answer. You may use the following information in your answer: Vesalius and the printing press.</li> <li>2. 'William Harvey had the greatest impact on medicine in the Renaissance period.' How far do you agree? You may use the following information in your answer: Vesalius and Sydenham.</li> </ol>

## GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 2 - The Medical Renaissance in England 1500-1700

### Consolidation questions for Renaissance Medicine

1. What was the approach to the Four Humours in the Renaissance?	16. What did Andreas Vesalius discover?
2. What was still thought of as a common cause of disease in the Renaissance?	17. What impact did Andreas Vesalius have on other individuals?
3. What was Thomas Sydenham known as (nicknamed)?	18. What happened to hospitals during the Renaissance (1500s)?
4. What was Thomas Sydenham's approach to medicine?	19. What were Pest Houses?
5. What was invented that spread the new ideas of the Renaissance quickly?	20. Despite hospitals, where did most of the medical care take place in the Renaissance?
6. What was the Royal Society set up for?	21. What was the role of women in the Renaissance?
7. What happened to the Church's control over medicine during the Renaissance?	22. What did William Harvey discover?
8. What <b>changes</b> were there to the approach to the <u>causes</u> of disease from the medieval period to the Renaissance?	23. What helped William Harvey make his discoveries?
9. What <b>continuities</b> were there to the approach to the <u>causes</u> of disease from the medieval period to the Renaissance?	24. When was the Plague of London?
10. What were the <b>changes</b> to <u>treatment</u> during the Renaissance?	25. How many people were killed?
11. What were the <b>continuities</b> to <u>treatment</u> during the Renaissance?	26. What animals were killed to stop the disease spreading?
12. What were the <b>changes</b> to <u>prevention</u> during the Renaissance?	27. What did people still believe was the primary cause of the Plague of London?
13. What were the <b>continuities</b> to <u>treatment</u> during the Renaissance?	28. What are the key factors that are involved in this period?
14. Outline Medical training in the Renaissance (LEARN ALL)	29. Why is it that despite so much change, there was little progress made towards medicine?
15. What was the approach to dissection during Renaissance? (eg was it accepted?)	30. Who is the most important individual in this period and why?

# GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 3 - Medicine in 18<sup>th</sup> -19<sup>th</sup> Century Britain

Key dates	
1796-98	Edward Jenner discovers the smallpox vaccination
1803	Royal Jennerian Society established
1842	William E Clarke successfully uses ether to anaesthetize a patient
1847	James Simpson discovers effects of chloroform
1848	First Public Health Act
1854	Nightingale treats wounded soldiers in Crimea
1854	John Snow discovers the significance of the Broad Street Pump in causing cholera
1859	Nightingale publishes 'Notes on hospitals'
1861	Pasteur discovers germ theory
1865	Lister uses carbolic acid in surgeries for the first time
1878	Pasteur begins his work creating vaccinations
1882	Koch publishes his four hypotheses and discovers the bacteria causing TB
1895	X-Rays are discovered by Roentgen
1898	Royal Army Medical Corps (RAMC) founded

Key people	
Edward Jenner	Discovers vaccination - particularly for smallpox
James Simpson	Discovers use of Chloroform as an anaesthetic
Florence Nightingale	Changes care in hospitals so that it is more effective
Louis Pasteur	Discovers germ theory
John Snow	Creates link between water and cholera
Joseph Lister	Creates use of antiseptic in surgery
Robert Koch	Proves germ theory and creates many vaccines
William Roentgen	Discovers the use of X-Rays

Key Terms/Concepts	
The Enlightenment	A movement in Europe during the 18 <sup>th</sup> century that promoted the idea that people could think for themselves and that traditional authorities, like the nobility and the church, should not be able to control every day life
Microbes	A microbe is a living organism that is too small to see without a microscope
Decaying matter	Material, such as vegetables or animals, that has died and is rotting
Organic	Something that is living or has once been alive
Culture	Bacteria grown under controlled conditions
Bacteriology	The study of bacteria
Aseptic Surgery	Surgery where microbes are prevented from getting into a wound in the first place, as opposed to being killed off with an antiseptic
Inoculate	Deliberately infecting oneself with a disease in order to avoid a more severe case of it later on
Cowpox	A disease causing red blisters on the skin, similar to smallpox. It can be transmitted from cows to humans
Public vaccinators	Doctors paid by the government to vaccinate people against smallpox
Antibodies	Particles inside the body that identify and help to remove germs. The body creates them when first encounters the germ so that it can fight off the same disease if it comes back
Laissez-faire	French term meaning 'leave it be' It is used to describe governments who do not get involved in the day-to-day lives of their population
Dehydrated	When the body does not have enough water to keep the organs working properly
Cesspit	A pit for storing sewage or waste



# GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 3 - Medicine in 18<sup>th</sup> -19<sup>th</sup> Century Britain

From the start of the 18<sup>th</sup> Century rapid changes began to occur in medicine. Between 1500-1700 many new medical theories had been published: however, it was not until later that those theories were put into practice. At the start of the period c1700-c1900 the Theory of Four Humours was no longer widely believed, but it had not been replaced by anything else. Bleeding and purging were still common treatments. Apothecaries still sold herbal remedies and most treatment was carried out by women in the home. Luckily, epidemic diseases such as the plague seemed to have disappeared, but smallpox and other diseases were common. By 1900 the medical landscape had been completely transformed. Germs had been discovered, and there was ongoing work to create vaccines and develop treatments for the diseases caused by them. This was an incredibly exciting period in the history of medicine: a time when all the ideas and theories of the past came together to change the way patients were diagnosed and treated.

Medicine in 18-19 <sup>th</sup> century Britain			
Believed the following about illness...			
<b>Prevention</b>	Church Hygiene Diet Purifying the air Vaccinations	<b>Treatment</b>	Herbal Remedies Prayer Bleeding and Purging Rest, exercise and diet Cure all remedies Development of effective anaesthetics Carbolic Spray for antiseptic surgery
<b>Causes</b>	God Miasma Four Humours (partially) Germ Theory	<b>Healers</b>	Physicians Surgeons Hospitals Women at home and community care

## Key factors involved in Medicine during the Industrial Period 1700-1900

Government	Communication	Attitudes (Seeking Improvement)	Individuals	Science and Technology	Chance
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## Exam Questions

'Explain one way' 4 mark	'Explain' 12 mark	'How far?' 16 mark
<ol style="list-style-type: none"> <li>1. Explain one way in which ideas about causes of disease and illness were similar in 17<sup>th</sup> and 19<sup>th</sup> centuries.</li> <li>2. Explain one way in which hospitals differed in 13<sup>th</sup> and 19<sup>th</sup> centuries.</li> <li>3. Explain one way in which treatment of illness were similar in 17<sup>th</sup> centuries and 19<sup>th</sup> centuries.</li> <li>4. Explain one way in which ideas about prevention differ in 17<sup>th</sup> and 19<sup>th</sup> centuries.</li> </ol>	<ol style="list-style-type: none"> <li>1. Explain why there was rapid change in surgical treatments in the period 1700-1900. You may use the following in your answer: chloroform and Joseph Lister.</li> <li>2. Explain why there was rapid change in the prevention of smallpox after 1798. You may use the following in your answer: inoculation and the government.</li> </ol>	<ol style="list-style-type: none"> <li>1. 'There was rapid change in ideas about the causes of illness and disease in the period 1700-1900'. How far do you agree? You may use the following in your answer: Spontaneous Generation and Louis Pasteur.</li> <li>2. 'Louis Pasteur's publication of the Germ Theory was the biggest turning point in medicine in the period 1700-1900'. How far do you agree? You may use the following in your answer: Jenner and Koch.</li> </ol>



**GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 3 - Medicine in 18<sup>th</sup> -19<sup>th</sup> Century Britain**

**Consolidation questions for Industrial Medicine**

1. What was spontaneous generation?	16. What are the problems sometimes caused with inoculation?
2. What was germ theory and who discovered it?	17. What is a vaccination?
3. Who was Robert Koch and what did he discover?	18. What was the name of the man who discovered a vaccination for smallpox?
4. Who did Koch and Pasteur inspire and influence?	19. What disease similar to smallpox did he use to vaccinate smallpox?
5. How did individuals (e.g. Pasteur/Koch) impact the view of the cause of disease during the Industrial period?	20. By 1800, how many people were vaccinated?
6. How did technology impact the view of the cause of disease during the Industrial period?	21. Why was vaccination, seen as a "one-off"?
7. How did more people getting the vote impact the view of the cause of disease Industrial period?	22. What was the main government policy at the beginning of the 19 <sup>th</sup> century and what impact did it have on the development of medicine?
8. What war did Florence Nightingale serve in and what were the changes she made at the army hospital?	23. When did this end?
9. What changes did she make to nurses and hospitals back in Britain?	24. What was included in the Public Health Act of 1848?
10. What is an anaesthetic?	25. What was included in the Public Health Act of 1875?
11. What was the mild anaesthetic invented to help with dental operations?	26. Who was Edwin Chadwick?
12. What anaesthetic did James Simpson invent?	27. What was 'The Great Stink' of 1858?
13. What was an antiseptic?	28. What was water-based disease that caused thousands of deaths?
14. What antiseptic did Joseph Lister invent?	29. What was the name of the man that realised that the cause was in the water rather than miasma?
15. What is an inoculation?	30. How did he work this out?

## GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 4 - Medicine in 20<sup>th</sup> and 21<sup>st</sup> Century Britain

Key dates	
1902	Archibald Garrod theorises that hereditary diseases are caused by missing information in the body's chemical pathway.
1907	Paul Ehrlich tested arsenic compounds to find a cure for syphilis - he tried over 600.
1909	Hata tests all the compounds again and discovers Salvarsan 606 - the magic bullet.
1928	Fleming discovers Penicillin.
1932	Gerhard Domagk discovers Prontosil - another magic bullet.
1938	British scientists develop M&B 693.
1940	Florey and Chain develop penicillin into a usable treatment on mice - the first real antibiotic.
1941	US scientists George Beadle and Edward Tatum prove Garrod's theory. Florey and Chain use penicillin successfully on a human.
1942	Diphtheria Vaccine introduced. US Pharmaceutical companies begin mass production of penicillin.
1948	Creation of the NHS.
1950	Whooping Cough and Poliomyelitis vaccine introduced.
1951	Rosalind, Franklin and Maurice create images of DNA.
1953	Watson and Crick publish their paper showing the model of DNA.
1956	Clean Air Act
1957	Chemist John Sheehan creates a chemical copy of penicillin. This allows the drug to be altered in order to target different diseases.
1961	Tetanus vaccine introduced.
1968	Measles vaccine introduced. Clean Air Act
1970	Rubella Vaccine introduced.
1990	Human Genome Project launched.

Key Terms/Concepts	
Hereditary	Hereditary diseases are caused by genetic factors. This means that they can be passed on from parents to their children.
DNA	Short for deoxyribonucleic acid, DNA carries genetic information from one living thing to another. DNA information determines characteristics like hair and eye colour.
Genome	The complete set of DNA containing all the information needed to build a particular organism. In humans, this is more than three billion DNA pairs. It is unique for every human being, except identical twins.
Haemophilia	A genetic disease passed from parent to child that stops blood clotting. Sufferers from haemophilia must be careful, as an open wound will not heal correctly. Famously, many of Queen Victoria's ancestors suffered from haemophilia.
Mastectomy	Surgery during which a person has one or both breasts removed.
Compound	A mixture of two or more different elements.
MRSA	A strain of drug resistant bacteria that is particularly hardy and resistant to antibiotics
NHS	National Health Service
Penicillin	An antibiotic used to treat bacterial infections
Human Genome Project	18 teams of scientists all over the world mapping the human genome

Key people	
James Watson	American Biologist who 'discovers' DNA
Francis Crick	English Physicist who 'discovers' DNA
Rosalind Franklin	Took an X Ray photograph of DNA
Paul Ehrlich	Tested arsenic as a cure for syphilis
Hata	Discovered Salvarsan 606 as first magic bullet
Gerhard Domagk	Discovered Prontosil
Alexander Fleming	Discovered penicillin
Howard Florey	Tested penicillin in humans
Ernst Chain	Tested penicillin in humans

# GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 4 - Medicine in 20<sup>th</sup> and 21<sup>st</sup> Century Britain

By 1900, all the pieces were in place to build a better approach to assessing and managing human health. People now understood that illness and disease could be caused by microbes, and scientists had begun to experiment with ways of treating and preventing diseases using this new knowledge. Scientists began to investigate causes of disease that were not related to microbes. Genetics and lifestyle factors were investigated as other potential factors. Chemical treatments were developed to target specific diseases, whilst antibiotics were discovered that could treat a whole range of illnesses that might have previously been fatal. The government also developed a new attitude towards the nations health and free medical care was provided from the NHS.

Medicine in 20 <sup>th</sup> century Britain			
Believed the following about illness...			
<b>Prevention</b>	1906-1918 Liberal reforms including Free school meals, pensions and National Insurance 1942 Beveridge Report 1948 Creation of NHS Introduction of screening programmes Vaccination Programmes	<b>Treatment</b>	Herbal Remedies Prayer Rest, exercise and diet Chemical drugs Antibiotics Radiotherapy/Chemotherapy Aseptic surgery Blood transfusions Keyhole and micro surgery
<b>Causes</b>	Germ Theory Genetic Causes	<b>Healers</b>	Doctors Surgeons Hospitals

## Key factors involved in Medicine during Modern Medicine 1900-Present

Government	Communication	Attitudes (Seeking Improvement)	Individuals	Science and Technology	War	Chance
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## Exam Questions

'Explain one way' 4 mark	'Explain' 12 mark	'How far?' 16 mark
<ol style="list-style-type: none"> <li>1. Explain one way in which ideas about causes of disease and illness were similar in 19<sup>th</sup> and 20<sup>th</sup> centuries.</li> <li>2. Explain one way in which hospitals differed in 13<sup>th</sup> and 20<sup>th</sup> centuries.</li> <li>3. Explain one way in which treatment of illness were similar in 19<sup>th</sup> centuries and 20<sup>th</sup> centuries.</li> <li>4. Explain one way in which ideas about prevention differ in 17<sup>th</sup> and 20<sup>th</sup> centuries.</li> </ol>	<ol style="list-style-type: none"> <li>1. Explain why there was rapid change in the treatment of illness in the 20<sup>th</sup> century. You may use the following in your answer: Fleming and Florey and Chain.</li> <li>2. Explain why there was a rapid change in the prevention of illness in the 20<sup>th</sup> Century. You may use the following in your answer: government laws and vaccinations.</li> </ol>	<ol style="list-style-type: none"> <li>1. 'The discovery of penicillin was the biggest turning point in the treatment of illness.' How far do you agree? You may use the following in your answer: Salvarson 606 and Fleming.</li> <li>2. 'There was rapid change in the prevention of illness in the 20<sup>th</sup> Century.' How far do you agree? You may use the following in your answer: vaccinations and government laws</li> </ol>

**Consolidation questions for Modern Medicine**

1. What is a hereditary disease?	11. How did technology and science help with the development of penicillin?
2. Who discovered DNA?	12. How did WWI/WWII help with the development of penicillin?
3. What lifestyle choices did the government advise people to avoid?	13. How did the US government help with the development of penicillin?
4. What new technologies were invented to diagnose disease in the modern era?	14. How did the government do to attempt to prevent lung cancer?
5. What were magic bullets?	15. How was lung cancer diagnosed?
6. What sexually transmitted disease did a magic bullet cure?	16. What is chemotherapy and what impact would it have on lung cancer?
7. What improved prevention of disease in the modern era?	17. What is radiotherapy and what impact would it have on lung cancer?
8. Who was Alexander Fleming and what did he discover?	18. What was STAGE 1 of the development of the National Health Service (NHS)?
9. Who were Florey and Chain and how did they develop Fleming's work?	19. What was STAGE 2 of the development of the National Health Service (NHS)?
10. How did individuals (e.g. Florey) help with the development of penicillin?	20. What did the government pass in 1956 and 1968 and why?

## GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 5 - Site Study: British Sector of the Western Front 1914-18: injuries, treatments and the trenches

Key dates	
1914	Britain declared war on Germany.
1914	First Battle of Ypres.
1915	Complex trench system develops.
1915	Second Battle of Ypres. Germans use Chlorine gas for first time. Phosgene gas used towards end of the battle.
1916	Battle of the Somme.
1917	Battle of Arras.
1917	Third Battle of Ypres.
1917	Battle of Cambrai.
1917	First use of Mustard gas by the Germans
1918	End of the First World War.

Key people	
Harold Gillies	New Zealand Ear, Nose and Throat specialist who developed plastic surgery.
Charles Valadier	French dentist working on facial disfigurement.
Harvey Cushing	American Neurosurgeon who developed brain surgery on the Western front.
Lawrence Bruce Robertson	Canadian doctor who pioneered blood transfusions on the Western Front.
Geoffrey Keynes	British doctor who designed a portable blood transfusion kit.
Oswald Hope Robertson	American doctor who developed the use of stored blood.
Robert Jones and Hugh Thomas	Developed the Thomas Splint.

Key Terms/Concepts	
Radiology Department	The hospital department where X-Rays are carried out.
Blood Transfusion	Blood taken from a healthy person and given to another person
Universal Blood Group	This blood group can be used in a transfusion to a recipient with any other blood group
Salient	An area of a battlefield that extends into enemy territory, so that it is surrounded on three sides by the enemy and is therefore in a vulnerable position.
RAMC	Royal Army Medical Corps. This branch of the army was responsible for medical care and was formally founded in 1898.
FANY	First Aid Nursing Yeomanry. Founded in 1907, this was the first women's voluntary organization to send volunteers to the Western Front. It provided frontline support for the medical services, for example by driving ambulances and engaging in emergency first aid.
The Thomas Split	Splint used to keep leg rigid and prevent blood loss during transport.
Neurosurgery	Surgery carried out on the nervous system, especially the brain and spine.
Local Anaesthetic	Keeping a patient awake during an operation, with the area being operated on numbed to prevent pain.
General Anaesthetic	Putting a patient to sleep during an operation.
CCS	Casualty Clearing Stations
RAP	Regimental Aid Posts
ADS	Advance dressing station
MDS	Main dressing station
Provenance	Nature, Origin, and Purpose of the source. What? When? Who? Where? Why?

# GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 5 - Site Study: British Sector of the Western Front 1914-18: injuries, treatments and the trenches

**Source A:** From an account by Reverend Leonard Pearson, who was the army chaplain at Casualty Clearing Station 44 during the Battle of the Somme (1916).

I spent most of my time giving anaesthetics. I had no right to be doing this because I had no medical qualifications, but we were simply so rushed. We couldn't get the wounded into the hospital quickly enough and the journey from the battlefield was simply terrible for these poor lads. It was a question of operating as quickly as possible. If they had to wait their turn in the normal way, until the surgeon was able to perform the operation with a doctor giving the anaesthetic, it would have been too late for many of them. As it was, many died. We all simply had to help and do anything that was needed.

**Source B:** From the diary of Oswald Robertson, written on 30 November 1917. He was an army surgeon working on the Western Front during the First World War.

Men were horribly mutilated - many were dying when brought into the ward. All the beds were full and we began putting stretchers on the floor. Blood everywhere - clothes soaked in blood, pools of blood in the stretchers, streams of blood dropping from the stretchers to the floor. My rubber apron was one solid red smear. All we could do was try to stop the bleeding and get the patients as comfortable as possible. I could only transfuse an occasional patient. The majority had to take their chance and go through the operation as best they could.

British soldiers fought in the trenches along the Western Front between 1914 and 1918, during the First World War. If you had been a soldier in the British sector of the Western Front in France and Flanders, you would have been in danger from many different things. Whilst fighting for King and country, you would have faced dangers from shelling, grenades, gas and hand-to-hand combat. Disease - both in body and mind - also threatened you, as you lived in the trenches. It would not be unusual to be in a front line trench under constant bombardment for up to a month. You might be one of the 2.7 million casualties in the British sector of the Western front during the four years of fighting. Of this number, about one quarter were not seen by medical services, because they were either killed or taken prisoner - this totalled around 700,000 men. The remaining two million men were treated by medical services in France or back in England. The scale of medical treatment for wounded soldiers was vast. Of those casualties seen by medical services, 5.6% died from the wounds that they suffered. Although this means that more than 150,000 soldiers died after receiving medical care, it also means that the vast majority of those treated survived their wounds and illnesses. This is a testament to the success of medical care during the First World War.

## Exam Questions

<i>'Describe two features of'... 4 mark</i>	<i>'How useful are sources A and B for an enquiry into...' 8 marks</i>	<i>'Study source _ How could you follow up Source _ to find out more about...?' 4 marks</i>
<ol style="list-style-type: none"> <li>1. Describe two features of aseptic surgery in the early 20<sup>th</sup> Century.</li> <li>2. Describe two features of the support trench system on the Western Front.</li> <li>3. Describe two features of the RAMC.</li> <li>4. Describe two features of blood transfusions on the Western Front.</li> </ol>	<ol style="list-style-type: none"> <li>1. How useful are Sources A and B for an enquiry into the problems involved in performing operations on the Western Front?</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Study Source B.</b> How could you follow up Source B to find out more about the problems involved in performing operations on the Western Front?</li> </ol>



**GCSE History - Knowledge Organiser - Medicine Through Time C1250-present - Topic 5 - Site Study: British Sector of the Western Front 1914-18: injuries, treatments and the trenches**

<b>Consolidation questions for Site Study: The British Sector of the Western Front 1914-1918</b>	
1. What aseptic surgery? Give examples.	14. Explain the effects of gas masks on soldiers and army policy?
2. What are x-rays and when were they introduced into hospitals?	15. What was the role of RAMC?
3. What are blood transfusions and when were they introduced?	16. What was the role of FANY?
4. What was the front-line trench?	17. What were the four stages of treatment of a wounded soldier?
5. What were communication trenches?	18. What was the role of the Regimental Aid Post (RAP)?
6. Explain the conditions of soldiers in the trenches.	19. What was the role of the Dressing Stations (ADS)?
7. How did the Western Front terrain make dealing with wounded soldiers difficult?	20. What was the role of the of the Casualty Clearing Stations (CCDs)?
8. What were stretcher-bearers and what were the problems associated with them?	21. What was the role of the Base Hospitals?
9. What were the types of ambulances used on the Western Front?	22. What was a Thomas Splint?
10. What types of ambulances were used from the front to base hospitals?	23. What were blood transfusions?
11. Describe the effects of poison gas.	24. What were mobile x-rays?
12. Describe the effects of rifles and explosives on soldiers during WWI?	25. Explain the introduction of plastic surgery and why it was needed?
13. Describe the effects of shrapnel on soldiers during WWI?	26. What was the name that brought in and practiced plastic surgery?